## ABSTRACT OF THE DISCLOSURE

The present invention relates to a machine tool maintenance system, which evaluates and controls the static and/or dynamic characteristics by operating the machine, whereby the static and/or dynamic characteristics of the machine tool 20 can be evaluated and controlled at a user side, and in addition, preventive measures can be taken based on the obtained results of evaluations. This maintenance system 1 comprises acceleration sensor 11a and the like for detecting the static and/or dynamic conditions of the machine tool 20, reference value storage section 34 for storing reference values that are set in advance as standard conditions of the machine tool 20, judgement section 37 for evaluating the static and/or dynamic characteristics of the machine tool 20 and judging whether or not the characteristics are acceptable based on detection signals detected by the acceleration sensor 11a and the like and the reference values stored in the reference value storage section 34, and output controller 33 for outputting the results of judgement obtained by the judgement section 37 to output device 40.